AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Currently Amended) Composition intended for the implementation of a cytotoxic treatment in mammals, comprising a vector or a mixture of vectors comprising:

(i) a nucleic acid sequence encoding all or part of an MIP chemokine or a natural variant of ~~MIP1α or~~ MIP1β and,

(ii) at least one nucleic acid sequence encoding IL-2,

wherein said nucleic acid sequences (i) and (ii) are ~~being~~ placed under the control of the elements required for ~~their~~ expression of both IL-2 and MIP 1β chemokine or said natural variant in a host cell of said mammal;

~~wherein the compound is directly administered via a vector or a mixture of vectors expressing both IL-2 and a MIP chemokine;~~

~~and wherein the IL-2 and MIP chemokine work together synergistically~~.

Claims 2-6 (Canceled)

Claim 7 (Previously Presented) The composition according to Claim 1, comprising in (ii) at least two nucleic acid sequences encoding interleukin-2 (IL-2).

Claims 8-10 (Canceled)

Claim 11 (Previously Presented) Composition according to Claim 1, wherein said nucleic acid sequences (i) and (ii) are inserted into a recombinant vector of plasmid or viral origin.

Claim 12 (Previously Presented) Composition according to Claim 11, wherein said nucleic acid sequences (i) and (ii) are inserted into the same recombinant vector.

Claim 13 (Previously Presented) Composition according to Claim 11, wherein said nucleic acid sequences (i) and (ii) are inserted into distinct recombinant vectors.

Claim 14 (Currently Amended) Vector comprising:

(i) a nucleic acid sequence encoding all or part of a ~~MIP1α,~~ MIP1β chemokine or a natural variant of ~~MIP1α or~~ MIP1β, and

(ii) at least one nucleic acid sequence encoding IL-2,

said nucleic acid sequences (i) and (ii) being placed under the control of the elements required for their expression in a host cell.

Claim 15 (Previously Presented) Vector according to Claim 14, wherein it is a viral vector.

Claims 16-18 (Canceled)

Claim 19 (Currently Amended) Formulation intended for the implementation of a cytotoxic treatment in mammals, comprising the composition according to Claim 12 ~~13~~ or Claim 1, and a support which is pharmaceutically acceptable.

Claims 20-24 (Canceled)

Claim 25 (Previously Presented) The composition according to claim 13, wherein said recombinant vectors are adenoviral vectors defective for the replication.

Claim 26 (Previously Presented) The vector of claim 15, wherein said viral vector is an adenoviral vector deriving from an adenovirus.

Claim 27 (Previously Presented) The vector of claim 26, wherein said adenoviral vector is defective for replication.

Claim 28 (Previously Presented)The vector of claim 27, wherein said adenoviral vector defective for replication is deleted of the E1 region.

Claim 29 (Previously Presented)The vector of claim 27, wherein said adenoviral vector defective for replication is deleted of the majority of the E1 and of the E4 regions.

Claim 30 (Previously Presented)The vector of claim 28 or 29, further lacking all or part of the E3 region.

Claim 31 (Previously Presented)The vector of claim 15, wherein said viral vector is a poxviral vector deriving from a poxvirus.

Claim 32 (Previously Presented) The vector of claim 31, wherein said poxvirus is selected from the group consisting of vaccinia virus, MVA and canarypox.

Claim 33 (New) A method for treating a proliferative disease in a patient in need, said method comprising administering an effective amount of a composition by direct administration into an accessible tumor or at its periphery, said composition comprising a vector or a mixture of vectors comprising (i) a nucleic acid sequence encoding all or part of a MIP chemokine or a natural variant of MIP-1αor MIP-1β, and (ii) at least one nucleic acid sequence encoding IL-2,

wherein said nucleic acid sequences (i) and (ii) are placed under the control the elements required for expression of both IL-2 and said MIP chemokine in said patient;

wherein said IL-2 and MIP chemokine work together synergically to inhibit the growth or cause the rejection of a tumor in said patient when compared to the anti-tumor response in said patient administered with a composition comprising a vector comprising only the nucleic acid sequence (i) or the nucleic acid sequence (ii).

Claim 34. (New) The method according to claim 33, wherein said vector is an adenoviral vector.

Claim 35. (New) The method according to claim 34, wherein said adenoviral vector is defective for the replication.

Claim 36. (New) The method according to claim 35, wherein said adenoviral vector defective for replication is deleted of the E1 region.

Claim 37. (New) The method according to claim 35, wherein said adenoviral vector defective for replication is deleted of the majority of the E1 and of the E4 regions.

Claim 38. (New) The method according to claim 36 or 37, further lacking all or part of the E3 region.

Claim 39. (New) The method according to claim 33, wherein said vector is a poxviral vector deriving from a poxvirus.

Claim 40. (New) The method according to claim 39, wherein said poxvirus is selected from the group consisting of vaccinia virus, MVA and canarypox.